

## Abstract

The invention is directed to an arrangement and processes for the suction removal of waste products such as smoke and tissue particles in the ablation of biological tissue by means of a laser beam (4), wherein the laser beam (4) is directed to the tissue through the orifice (3) of a tubular channel (2) and the waste products are sucked through the orifice (3) into the channel (2). According to the invention, it is provided in an arrangement of the type mentioned above that the inner wall (6) of the channel (2) has at least one outlet opening (8) for a gas in the vicinity of the orifice (3) and the flow of gas is directed to the center of the channel and therefore toward the laser beam (4). In this way, it is effectively achieved that the gas does not flow through between the orifice (3) and the treatment area so as to flow over the surface of the substance, but exits already from the orifice (3) or from the immediate vicinity of the orifice (3) under by suitable pressure and is guided into the interior of the channel.